ABSTRACT

In calibrating a motion picture film scanner, a calibration element is provided that is composed of a multi-step neutral gray series comprised of a plurality of known density patches, each corresponding to one or more prescribed aim voltages, that substantially represent the full density vs. exposure range of a photographic element. The calibration element is scanned with the motion picture film scanner and one or more signal voltages are generated for each density patch. The motion picture film scanner is then adjusted to bring the signal voltages toward the prescribed aim voltages, thereby generating one or more adjustments that compensate for errors from the prescribed aim voltages and capture substantially the full range of the motion picture film. Since each motion picture film that is scanned by the film scanner is a particular film stock, i.e., a particular film type, the calibration further includes applying a custom correction to the output of the motion picture film scanner for the particular film type being scanned. The custom correction may be a neutral scale correction provided by a one-dimensional look up table.